

AMENDMENT AND RESPONSE

Serial No.: 09/501,876

CK
CM

wherein the concentrate has substantially no free water, has an extended shelf life or greater than one month and when added to an aqueous diluent provides a dye that indicates the presence of an active chlorine concentration for a predetermined time of 15 minutes to 24 hours.

Please add the following new claims:

CS

53. (New) The active chlorine containing solid unit of claim 1, wherein the solid unit comprises a uniform mixture of the source of chlorine and the source of dye.

54. (New) The particulate composition of claim 9, wherein the particulate composition comprises a uniform mixture of the encapsulated source of chlorine and the dye.

REMARKS

Claims 1-9, 11-19, 21-27 and 29-54 are pending in the present application. Of these claims, claims 30-49 and 52 are withdrawn from further consideration as being drawn to a nonelected invention. Applicants respectfully request reconsideration of the present claims in view of the following remarks.

I. Formal Matters:

Continued Prosecution Application

Applicants acknowledge Examiner Yu's acceptance of a request for a Continued Prosecution Application (CPA) under 37 C.F.R. §1.53(d).

Restriction Requirement

Examiner Yu has made her restriction requirement final. Claims 30-49 and 52 are withdrawn from further consideration pursuant to 37 C.F.R. §1.142(b), as being drawn to a nonelected invention. For the record, Examiner Yu has not responded to the arguments presented in Applicants' August 12, 2002 response to the restriction requirement, namely, that the two groups of claims can be searched and examined without serious burden on Examiner Yu, especially since Examiner Yu has already searched and examined both sets of claims in the November 21, 2001 Office Action (paper no. 10).

AMENDMENT AND RESPONSE

Serial No.: 09/501,876

Applicants' election of Group I, claims 1-9, 11-19, 21-27, 29 and 50-51, is **with traverse**.
Applicants respectfully request reconsideration of the restriction requirement.

II. Prior Art Rejections:

Claim Rejections Under 35 U.S.C. §103(a)

Claims 1-9, 11-19, 21-27, 29, 50 and 51 are rejected under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 5,358,653 to Gladfelter et al. (hereinafter "Gladfelter") in view of U.S. Patent No. 4,683,072 to Holdt et al. (hereinafter "Holdt") and U.S. Patent No. 4,248,827 to Kitko (hereinafter "Kitko").

Applicants' claimed invention, embodied in independent claim 1, is drawn to an active chlorine containing solid unit comprising, *inter alia*, (1) about 1 to 90 wt% of a source of chlorine; and about 10 to about 200 parts by weight of the source of chlorine per each part of dye; and (2) a source of dye, the dye comprising a particulate dye having a minimum particle size of about 200 microns; the dye, when reacted with the source of chlorine, changing or depleting its color over a predetermined time of 15 minutes to 24 hours; wherein the solid unit comprises a major dimension greater than about 2 millimeters and a weight greater than about 2 grams, the solid unit substantially free of an amount of free water sufficient to act as a reaction medium between the chlorine source and the dye.

Applicants' claimed invention, embodied in independent claim 9, is drawn to a particulate composition for forming an aqueous solution comprising, *inter alia*, (1) about 1 to 90 wt% of an encapsulated source of chlorine; and (2) an effective chlorine indicating amount of dye; wherein the concentrate has substantially no free water, has an extended life of greater than one month and when added to an aqueous diluent provides a dye that indicates the presence of an active chlorine concentration for a predetermined time of 15 minutes to 24 hours.

Applicants' claimed invention, embodied in independent claim 19, is drawn to an aqueous liquid cleaning or sanitizing composition comprising, *inter alia*, (1) a major proportion of an aqueous diluent; (2) a source of acid; (3) an effective amount of a dye to obtain a colored solution for a predetermined period of time of 15 minutes to 24 hours; and (4) an effective cleaning or sanitizing amount of chlorine bleach; wherein the aqueous composition has a pH less

AMENDMENT AND RESPONSE

Serial No.: 09/501,876

than 7 and the dye color is depleted or changed before the concentration is depleted to less than 50 ppm from the composition.

Applicants' claimed invention, embodied in independent claim 50, is drawn to a sanitizing solution useful in sanitizing a surface comprising, *inter alia*, (1) a major portion of an aqueous medium having a pH less than 7; (2) about 1 to 90 wt% of a source of an encapsulated active chlorine source resulting in at least 100 ppm active chlorine (3) an effective amount of a dye to obtain a colored solution for a predetermined period of time of 15 minutes to 24 hours; and (4) a solid diluent or extender salt.

In each of Applicants' independent claims, the claimed composition comprises (i) a source of chlorine, and (ii) an amount of dye sufficient to provide a color to an aqueous solution formed from the claimed composition for a period of time of at least 15 minutes. In the present invention, the source of chlorine and the dye may be uniformly mixed with one another to provide a solid composition even though the source of chlorine and the dye react with one another after a predetermined period of time of at least 15 minutes.

Gladfelter discloses solid rinse aid compositions useful in warewashing processes comprising an encapsulated chlorine source, one or more wetting or sheeting agents, optionally a hydrotrope solubilizer material and a diluent carrier. The solid rinse composition may also comprise other optional components such as dyes selected from dyes "**which are stable against degradation in the presence of strong chlorine releasing agents**" (Gladfelter at column 11, lines 32-35) to "provide a more pleasing appearance of the rinse aid." (Gladfelter at column 11, lines 38-39). Thus, the dyes disclosed by Gladfelter are specifically chosen not to lose or change their color in the presence of an effective concentration of chlorine releasing agents.

Examiner Yu acknowledges in the November 19, 2002 Office Action that Gladfelter "lacks the teaching of the changing or depletion of color over a period of time used to disinfect a substrate" (as recited in each of Applicants' independent claims 1, 9, 19 and 50) (see Office Action, page 4, lines 11-12). Examiner Yu relies on the teaching of Holdt and Kitko to allegedly cure the above-noted deficiencies in the teaching of Gladfelter.

Holdt discloses a two-component tablet **for cleaning and disinfecting toilet flush tanks**. The disclosed tablet comprises (i) component A consisting of a disinfectant selected from a chlorine-releasing compound or an active oxygen-containing compound or acid and (ii)

AMENDMENT AND RESPONSE

Serial No.: 09/501,876

component B consisting of a dye that degrades when contacted with the chlorine releasing compound (see Holdt, column 2, lines 61-66). The dye is present to signal the user that the tablet is functioning properly. It should be noted that component A and component B are configured within the final tablet so as to minimize contact between component A and component B. Contact between component A and component B is minimized to prevent premature interaction between component A and component B (see Holdt, column 1, lines 53-57).

Kitko also discloses compositions and methods for sanitizing toilets. The disclosed compositions comprise (i) a hypochlorite sanitizing agent and (ii) an oxidizable dye, each of which are dispensed from separate dispensing means into toilet flush water. The dye is oxidized from a colored state to a colorless state within 5 seconds to 10 minutes after contacting the hypochlorite (see Kitko, column 3, lines 53-59).

Examiner Yu reaches a conclusion of obviousness stating that

"[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the compositions of Gladfelter by incorporating the oxidizable dyes as suggested by Holdt and Kitko because of the expectation of successfully producing sanitizing composition which, upon the oxidization of the dyes upon the contact with hypochlorite changes the color of the solution and provides users the visual signals of the activity of the sanitizing agents." (November 19, 2002 Office Action, page 6, lines 3-8)

Applicants disagree.

Examiner Yu suggests that one of ordinary skill in the art, given the teaching of Gladfelter, would have (1) recognized a deficiency in the teaching of Gladfelter, namely, the inability of the warewashing composition of Gladfelter to change color over a period of time to indicate that the sanitizing solution needs to be changed to insure complete sanitation; (2) sought out the teaching of Holdt and Kitko related to toilet cleaning compositions; (3) selectively removed the oxidizable dyes from the toilet cleaning compositions of Holdt and Kitko; and (4) substituted the oxidizable dyes from the toilet cleaning compositions of Holdt and Kitko for the dyes disclosed in the warewashing composition of Gladfelter.

Applicants respectfully submit that one of ordinary skill in the art would not have been motivated to combine the select components of the warewashing compositions of Gladfelter with the select components of the toilet cleaning compositions of Holdt and Kitko as suggested

by Examiner Yu. The teaching of Gladfelter is directed to rinse aid compositions useful in **warewashing**, a process used to produce dishes and other wares, suitable for use in the preparation of food for human consumption. The teachings of Holdt and Kitko are directed to tablets and sanitizing agents for **cleaning toilet flush tanks**. Applicants respectfully submit that one of ordinary skill in the art would not seek out the art of toilet tank cleaning compositions given that the teaching of Gladfelter is directed to warewashing compositions.

Further, Applicants respectfully submit that there is no suggestion in Gladfelter, Holdt, Kitko or the combined teaching of Gladfelter with Holdt and Kitko, that would provide motivation to one of ordinary skill in the art to replace the dyes disclosed by Gladfelter, which are specifically selected to be stable against degradation in the presence of a strong chlorine releasing agent, with the dyes disclosed by Holdt and Kitko, which lose their color when oxidized by chlorine-releasing disinfectants. In fact, Gladfelter teaches away from such a substitution.

Gladfelter expressly teaches a solid rinse aid composition comprising an encapsulated chlorine source and optionally a dye selected from dyes "**which are stable against degradation in the presence of strong chlorine releasing agents**" (Gladfelter at column 11, lines 32-35) to "provide a more pleasing appearance of the rinse aid." (Gladfelter at column 11, lines 38-39). Therefore, not only is there no motivation to modify the warewashing compositions of Gladfelter as suggested in the Office Action, the teaching of Gladfelter teaches away from such a modification.

In addition, the teaching of Gladfelter is directed to a uniform mixture of encapsulated chlorine and a dye, whereas the compositions of Holdt and Kitko must be present as a two component composition. See Gladfelter, column 12, lines 5-24. Why would one of ordinary skill in the art, given the teaching of Gladfelter, be motivated to complicate the manufacturing process of Gladfelter by switching to a two component composition as required in the teachings of Holdt and Kitko? Applicants respectfully submit that one of ordinary skill in the art would not have been motivated to make such a modification as suggested in the Office Action.

Applicants respectfully submit that one of ordinary skill in the art would not have (i) combined the teaching of Gladfelter with the teachings of Holdt and Kitko, and (ii) modified

AMENDMENT AND RESPONSE
Serial No.: 09/501,876

the teaching of Gladfelter as suggested by the Office Action absent the impermissible use of hindsight. One of ordinary skill in the art would not have been motivated to modify the rinse aid compositions of Gladfelter containing dyes that resist degradation in the presence of strong chlorine releasing agents to form a rinse aid composition containing dyes that degrade in the presence of chlorine absent the impermissible use of hindsight. The only motivation for such a modification of the rinse aid compositions of Gladfelter has been deemed from a review of Applicants' invention, not from what is being taught or suggested in the cited art. For at least this reason, Applicants respectfully submit that the proposed combination of the teaching of Gladfelter with the teachings of Holdt and Kitko is improper.

Even if the combination of the teachings of Gladfelter, Holdt and Kitko is proper, the combined teaching still fails to suggest Applicants' claimed invention. There is no suggestion in the combined teaching of a warewashing composition, which changes or loses its color after a predetermined time of from 15 minutes to 24 hours.

For at least the reasons given above, Applicants respectfully submit that the combined teaching of Gladfelter, Holdt and Kitko fails to make obvious Applicants' claimed invention as embodied in independent claims 1, 9, 19, and 50. Since claims 2-8, 11-18, 21-27, 29, and 51 depend from independent claims 1, 9, 19, and 50 and recite additional claim features, Applicants respectfully submit that the combined teaching of Gladfelter, Holdt and Kitko also fails to make obvious Applicants' claimed invention as embodied in dependent claims 2-8, 11-18, 21-27, 29, and 51. Accordingly, withdrawal of this rejection is respectfully requested.

III. New Claims 53-54:

New claims 53-54 are directed to further embodiments of Applicants' claimed invention. New dependent claim 53 depends from independent claim 1 and is directed to an active chlorine-containing solid unit, wherein the solid unit comprises a uniform mixture of a source of chlorine and a source of dye. New dependent claim 54 depends from independent claim 9 and is directed to a particulate composition, wherein the particulate composition comprises a uniform mixture of an encapsulated source of chlorine and a dye. Support for new claims 53-54 can be found on page 23, lines 19-23.

AMENDMENT AND RESPONSE
Serial No.: 09/501,876

Applicants respectfully submit that new claims 53-54 are patentable over the art of record for at least the reasons given above in regard to claims 1-9, 11-19, 21-27, 29, and 50-51.

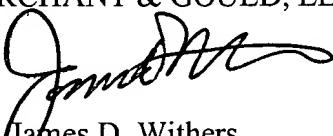
IV. Conclusion:

For at least the reasons given above, Applicants submit that claims 1-9, 11-19, 21-27, 29, 50-51, and 53-54 define patentable subject matter. Accordingly, Applicants respectfully request allowance of these claims.

Should the Examiner believe that anything further is necessary to place the application in better condition for allowance, the Examiner is respectfully requested to contact Applicants' representative at the telephone number listed below.

No additional fees are believed due; however, the Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, to Deposit Account No. 13-2725.

Respectfully submitted,
MERCHANT & GOULD, LLC



By: James D. Withers
Reg. No. 40,376

MERCHANT & GOULD, LLC
3200 IDS Center
80 South 80th Street
Minneapolis, Minnesota 55402-2215
404/954-5038

Attorney Docket No. 60037.1173USI1